

ABSTRACT OF THE DISCLOSURE

A water treatment system provides treated or softened water to a point of use by removing a portion of any hardness-causing species contained in water from a point of entry
5 coming from a water source, such as municipal water, well water, brackish water and water containing foulants. The water treatment system typically treats the water containing at least some undesirable species before delivering the treated water to a point of use. The water treatment system has a reservoir system in line with an electrochemical device such as an electrodeionization device. The water treatment system has a sensor or a set of sensors
10 for measuring at least one property of the water or an operating condition of the treatment system. The water treatment system also has a controller for adjusting or regulating at least one operating parameter of the treatment system or a component of the water treatment system to optimize the operation and performance of the system or components of the system to supply water tailored to quality requirements.